REDACTED VERSION

Managed Competition
Pre-competition Assessment Report
Environmental Services Department:
Landfill Functions

April 8, 2011

The Pre-competition Assessment Report was prepared in accordance with the Managed Competition Guide dated July 26, 2010. The report was prepared by the Business Office with assistance from subject matter experts from the Environmental Services Department.

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I. INTRODUCTION

Managed competition is a structured, transparent process that allows public sector employees to be openly and fairly compared with independent contractors for the right to deliver services. This strategy recognizes the high quality and potential of public sector employees and seeks to tap their creativity, experience and resourcefulness by giving them the opportunity to structure organizations and processes in ways similar to best practices in competitive businesses, yet still compatible with public sector realities.

The first step in managed competition is to conduct a Pre-competition Assessment (PCA) to evaluate whether a function is eligible and appropriate for competition. The purpose of this report is to document the PCA of operations functions for the Miramar Landfill and the City's closed landfills and burn sites, which include:

- Landfill Operations
- Greenery Operations
- Hazmat Landfill Load Check
- Fee Booth Operations
- Landfill Maintenance and Monitoring (LMM)

Each section of this report will address these five components of the operations functions for the Miramar Landfill and the City's closed landfills and burn sites in the level of detail required. For example, the staffing information can be presented in one table, but the availability of alternatives analysis is presented in more detail because the components have at least somewhat unique markets.

II. OVERVIEW OF FUNCTION

A. Background

The Environmental Services Department (ESD) ensures that all residents of San Diego are provided with a clean, safe, and ecologically-sound environment. ESD is organized into four divisions:

- The Waste Reduction and Disposal Division provides waste reduction and recycling education, technical assistance and programs to residents and business owners within the City of San Diego. The Division enforces solid waste and recycling provisions of the Municipal Code, conducts illegal dump abatements and community cleanups, operates a full service landfill and organic recycling facility for public use, and maintains eight closed landfills and eight inactive burn sites.
- The Collection Services Division provides weekly residential refuse collection, bi-weekly curbside collection of recyclable commodities and greens materials, and the collection and maintenance of street litter containers in business districts. The Division also procures, delivers and maintains City owned automated refuse, recycling and greenery containers.

- The Energy, Sustainability, and Environmental Protection Division manages the City's energy demand and conservation programs and explores innovative options to increase energy independence; supports regulatory compliance at City facilities, and works to advance more sustainable practices within the City and community. This is accomplished through technical assistance and project implementation for energy conservation and renewable energy, hazardous materials management, underground storage tank engineering, lead and asbestos compliance, hazardous substances enforcement at the Miramar Landfill, household hazardous waste collection, and the San Diego Sustainable Community Program.
- The Office of the Director facilitates the Department's delivery of quality environmental programs through the provision of administrative and regulatory support, community outreach and education, franchise and fiscal management, facility maintenance, human resources and training, information system management, customer service, and safety programs focusing on accident and injury prevention.

Figure 1 depicts the organizational structure of the Environmental Services Department and the landfill related functions in red italics that make up the scope of this PCA Report.

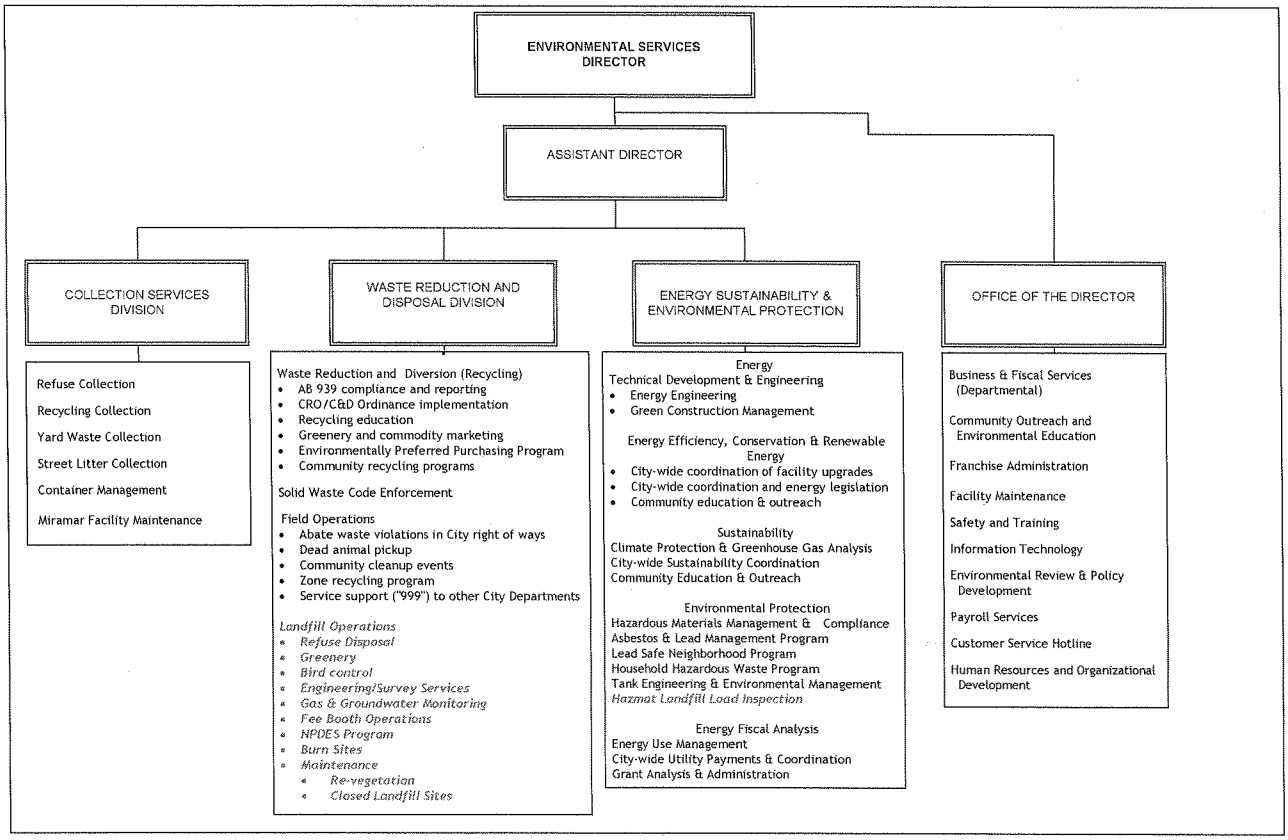

Figure 1: Organizational Chart

The operations functions for the Miramar Landfill and the City's closed landfills and burn sites are performed by **REDACTED** Full Time Equivalent (FTE) employees. The labor classifications that perform these functions are detailed in Table 1 (below), which displays the Fiscal Year (FY) 2011 budgeted staffing for the functions.

Function	Job Title	Job Number	FTE FY2011 Budgeted
Landfill Operations	Assoc Eng-Civil	20000143	
	Code Compliance Officer	20000306	
	Disposal Site Supervisor	20000390	Redacted
	Equipment Service Writer	20000439	
	Laborer	20000589	
	Land Surveying Assoc	20001019	
	Landfill Equipment Operator	20000580	Redacted
	Sr Civil Engineer	20000885	
Greenery Operations	Disposal Site Supervisor	20000390	
	Equipment Mechanic	20000420	
	Equipment Operator 1	20000426	
	Equipment Operator 2	20000430	Redacted
	Landfill Equipment Operator	20000580	
	Utility Worker 2	20001053	
Hazmat Landfill Load Check	Hazmat Inspector 2	20000521	
	Supervising Hazmat Inspector	20000947	Redacted
Fee Booth Operations	Disposal Site Rep	20000389	
	Senior Disposal Site Rep	20000907	
	Supervising Management Analyst	20000970	
Landfill Maintenance & Monitoring	Assistant Engineer-Civil	20000070	Redacted
	Associate Engineer-Civil	20000143	
	Biologist 2	20000655	
	Biologist 3	20000649	
	Lab Tech	20000590	Redacted
	Management Intern	90001073	
	Project Officer 1	20000761	
	Project Officer 2	20000763	
	Sr Civil Engineer	20000885	Redacted
	Sr Mechanical Engineer	20000856	
		Total:	

Table 1: Landfill Functions Staffing

The City of San Diego has been responsible for solid waste disposal since the passage of the People's Ordinance in May 1919. The Miramar Landfill opened in 1959 and has been the City's primary operational site since the early 1980's. The Miramar Landfill includes South Miramar, North Miramar, West Miramar Phase I, and the currently active West Miramar Phase II, which consists of 238 acres of fill area within the total 1,054 acres of the Miramar Landfill. The Miramar Landfill is operated by the City pursuant to a long-term ground lease with the United

States of America through the Department of the Navy. The City is also responsible for the maintenance and monitoring of eight inactive landfills and eight burn sites (former refuse burning sites). Although the City does not accept any refuse at these sites, continued monitoring and maintenance is required by regulatory agencies to minimize impacts to the environment and to protect public health and safety.

The following sections describe in more detail the operational functions for the Miramar Landfill that are included in the scope of this PCA.

Disposal Operations

The landfill is open daily (except New Year's Day, Easter Sunday, Thanksgiving Day and Christmas Day) and accepts waste for disposal from 7:00 am to 4:30 pm Monday through Friday and from 7:30 am to 4:30 pm on Saturday and Sundays. The Miramar Landfill is currently the only disposal site in San Diego County that is open on Sundays. In FY2010, the landfill received approximately 1 million tons of materials (910,000 tons of waste for disposal, 105,000 tons of green and wood waste for recycling and nearly 400 tons of salvaged material such as scrap metal, wood, and other green waste) from approximately 350,000 transactions and generated $23.5 million in disposal fee revenues. The landfill also provides the military free waste disposal in lieu of rent. The military waste constitutes the majority of what is considered "fee exempt" tonnage.

A large portion of the transactions at the Miramar Landfill are self-haul vehicles. These vehicles, which average less than 1 ton per load, include cars, station wagons, SUVs, pickup trucks and small trailers and require hand unloading by customers at the tipping deck of the landfill. These vehicles take longer to process at the fee booth, longer to unload at the tipping deck, and for safety reasons, must be separated from the larger refuse collection vehicles. This requires establishing a second tipping area and staffing it with traffic directors, hazardous materials inspectors and equipment/equipment operators to push and compact the waste.

Greenery Operations

The Greenery is located at the Miramar Landfill and is operated by ESD's Disposal Division operational staff. This operation uses dedicated and specifically trained personnel and equipment and there is minimal sharing of resources with disposal operations. It has been in place since the late 1980's and has always been operated by City employees. The Greenery is open to the public daily (except New Year's Day, Easter Sunday, Thanksgiving Day and Christmas Day) from 7:00 am – 4:30 pm, Monday through Friday and Saturday and Sunday 7:30 am – 4:30 pm. It is a state-permitted compost facility that subjects ground green material to a state regulated and defined "Process to Further Reduce Pathogens" producing a variety of mulch and compost products. Source-separated clean wood is also ground and colorized to make wood chips for use as ground cover.

The Greenery processes approximately 104,000 tons of organic wastes every year into soil amendment products for use by farmers, nurseries, landscapers, City departments, and residents. The incoming organic wastes include approximately 97,000 tons of landscaping green wastes; 1,900 tons of food waste; 3,500 tons of wood waste; 1,000 tons of Christmas trees, and less than 1,000 tons of drywall, pulverized paper, animal bedding, and other miscellaneous organic

wastes. Of these incoming tons, approximately 20% do not pay a gate fee (the fee charged to the user). Fees are not charged to the military as part of the Miramar Landfill ground lease and other fees have been waived based on the fee schedule authorized by the City Council. Other exempt customers include authorized non-profits, City of San Diego residents delivering their own greenery, and haulers delivering loads of Christmas trees.

The Greenery facility is on approximately 74 acres of the landfill site. In June 2009 ESD doubled the acreage of the Greenery to incorporate more feedstocks, including food rich loads from such places as the Gaslamp District, food waste from residential collection routes, food processing wastes, animal manure wastes, and other organic waste in order to divert more wastes from landfill disposal. It is anticipated that the tonnage may increase to over 150,000 tons per year when the acceptance of food waste is fully expanded.

Hazmat Landfill Load Check

The City of San Diego's Hazmat Landfill Load Check Program conducts random and targeted inspections of commercial and residential refuse loads entering the Miramar Landfill to ensure the loads contain only wastes that the Miramar Landfill is permitted to accept. Unacceptable wastes include hazardous waste, infectious waste, liquid wastes, polychlorinated biphenyls (PCBs), radioactive waste, and universal waste (as defined by Cal. Code Regs, tit. 22, div. 4.5, ch. 23). The Program identifies and manages unacceptable waste found in the landfill which is in turn correctly handled and transported to the appropriate disposal facility. The Program also provides public education and training for landfill staff on unacceptable waste identification.

Load Check conducted over 6,500 inspections and diverted approximately 19 tons of hazardous waste from the Landfill in FY2010. Nearly 250 inspections were conducted at the Fee Booth to provide waste evaluation and acceptance expertise to customers with potentially unacceptable wastes. The Program also referred 12 enforcement actions for particularly egregious cases to the appropriate regulatory agency or to the City or District Attorney for additional investigation and enforcement.

Hazmat Landfill Load Check is responsible for the review, approval, and tracking of all special wastes (as defined by California Public Resources Code Sections 41450 Article 8. Special Waste Component) received at Miramar Landfill and also provides emergency response and spill cleanup support to all areas of the landfill.

Fee Booth Operations

The Fee Booth Operations staff collects the fees associated with the disposal and recycling of material delivered to the Miramar Landfill; processes data generated while collecting the fees, produces reports as needed and oversees compliance of waste regulations, fee schedule, and the City's municipal codes. Fees are collected from a number of different disposal and recycling customers, including residents (City and non-City), businesses (City and non-City), governmental agencies and franchised haulers. The fees are collected per the Fee Schedule and Regulations document for the use of City of San Diego Waste Disposal Facilities, published in accordance with Municipal Code, Chapter VI, Article 6, Sections 66.0128 through 66.0129.

Fees collected at the landfill generate approximately $40.6 million in revenue annually that support three City funds. Fees can be paid by cash or check and through deferred accounts managed by the fee booth. The total fees assessed are made up of several components, with each component allocated into one of the three funds. The first, the Refuse Disposal Enterprise Fund, provides funds for the operation of the Miramar Landfill, Closed Landfill & Burn Site Monitoring, Solid Waste Code Enforcement, community cleanup programs, capital improvement projects and other City solid waste management projects and programs. Disposal fees generated a total of $25.6 million in FY2010. The second, the Recycling Enterprise Fund, provides funds for curbside commodity recycling and greenery collection, recycling code enforcement and waste reduction education/outreach and technical assistance programs. Revenue generated into this fund in FY2010 was $12.2 million. Finally, the General Fund supports various core City functions such as Police, Fire-Rescue, Residential Refuse Collection, Library and Park & Recreation. A total of $3.0 million was generated into the General Fund in FY2010.

Landfill Maintenance and Monitoring

The LMM function ensures compliance with federal, state and local regulations and permit requirements at the City's one active landfill, eight closed landfills and eight burn ash (burn dumps) sites. The scope of LMM activities for this PCA includes the eight closed landfills and eight burn sites. Approximately 28 percent of LMM activities (excluding biological services and the project officer assigned to Miramar Landfill) are directly related to West Miramar Landfill operations.

Activity	FTE	Percent of LMM
Groundwater Monitoring		**33%**
i. West Miramar	Redacted	52%
ii. North and South Miramar		7%
iii. Remaining Sites	Redacted	42%
Landfill Gas Monitoring		**11%**
i. West Miramar		10%
ii. North and South Miramar	Redacted	25%
iii. Remaining Sites		65%
Project Management (includes CIP and regulatory reporting)	Redacted	**56%**
i. West Miramar		17%
ii. North and South Miramar	Redacted	5%
iii. Remaining Sites		78%

Table 2: LMM Staffing

Regulations for landfill operations were established to protect the environment and surrounding properties and residents from adverse impacts related to the operation of landfill disposal facilities and the decomposition of the waste during operations and after site closure. The City has an obligation to monitor and maintain closed landfills for a minimum of 30 years under federal requirements incorporated in the Resource Conservation and Recovery Act (CFR 40, Part 258, Subtitle D) until the site has stabilized and no longer presents potential risks to the

environment. Due to the lack of moisture in the buried waste, decomposition is much slower in San Diego resulting in landfill maintenance and monitoring requirements that may extend 50 years or longer. This function is accomplished through a multi-disciplinary engineering, project management, regulatory compliance planning and permitting support services, as well as monitoring and maintenance activities. The function also consists of a biological staff that assists in the re-vegetation of landfill sites and protection of sensitive biological resources.

The monitoring activities include regular landfill gas (LFG) surface emission surveys, monitoring probes to determine if LFG is migrating from the landfill surface and/or beyond the landfill perimeter, sampling and analyzing ground water and surfaces waters, and reporting the results to the appropriate regulatory agency.

Maintenance requirements include repairs and upgrades to the LFG systems, drainage structures, landfill cover, and facilities located on and adjacent to the landfill sites. These activities ensure that all landfill surfaces have not become degraded due to differential settlement or erosion, drainage control facilities are functioning and can handle a 100-year, 24-hour storm event, and that required re-vegetation of the site is initiated and maintained. A significant portion of the monitoring activities and all of the laboratory analysis of the groundwater, surface waters, and landfill gas samples are performed under contracts and are overseen and managed by City staff.

B. Scope of Work and Grouping of Tasks and Activities

A critical step of the PCA process involves 'scoping and grouping,' defining the activities and tasks that comprise a function and determining whether they are suitable for competitive procurement together, individually, or not at all. A high-level Work Breakdown Structure (WBS) is provided as Table 3.

#	Function/Cost Center Name
1	**Landfill Operations**
1.1	Push, compact and cover waste
1.2	Maintain landfill roads
1.3	Install and maintain drainage control devices
1.4	Perform surface grading and maintenance
1.5	Install and maintain erosion control devices
1.6	Perform general control duties
1.6.1	Perform traffic control
1.6.2	Perform litter control
1.6.3	Perform dust control
1.6.4	Perform leachate control
1.6.5	Perform vector control
1.6.6	Perform bird control
1.7	Install and maintain landfill signs
2	**Greenery Operations**

#	Function/Cost Center Name
2.1	Process Materials
2.2	Grinding material
2.3	Forming and moving windrows
2.4	Aerating windrows
2.5	Add water to composting windrows
2.6	Screening
2.7	Air classification cleaning
2.8	Product blending
2.9	Coloring products
2.10	Residue disposal
2.11	Processing drywall
2.12	Processing food waste
2.13	Loading customers
2.14	Perform general control duties
2.14.1	Perform traffic control
2.14.2	Perform litter control
2.14.3	Perform dust control
2.14.4	Perform leachate control
2.14.5	Perform vector control
2.14.6	Perform bird control
2.15	Perform quality control functions
2.15.1	Monitoring contamination in incoming loads
2.15.2	Removing contamination from outgoing products
2.15.3	Enforcement/assessment of penalties
2.15.4	Product Sampling
2.16	Material marketing
2.16.1	Custom product manufacturing
2.16.2	Developing marketing materials
2.16.3	Customer relations and outreach
2.17	Research and development to increase diversion
3	**Hazmat Landfill Load Check**
3.1	Conduct solid waste inspections
3.2	Unacceptable waste identification
3.3	Investigate incidents involving the disposal of hazardous waste and other unacceptable wastes
3.4	Public education
3.5	Enforcement
3.6	Hazardous waste management
3.7	Special waste review and acceptance

#	Function/Cost Center Name
3.8	Emergency response
3.9	Training
3.10	Fee Booth support
4	**Fee Booth Operations**
4.1	Inspect material type
4.2	Assess appropriate tipping fees
4.3	Screen for illegal material
4.4	Comply with regulations
4.5	Collect, input, reconcile data
4.6	Cash and check handling and accounting
4.7	Customer service
4.7.1	Commodity sales
4.7.2	Education
5	**Landfill Maintenance & Monitoring**
5.1	Landfill gas [LFG] monitoring & collection
5.1.1	LFG migration probe monitoring
5.1.2	LFG surface emissions monitoring
5.1.3	LFG collection system operations
5.1.4	LFG system repair, maintenance, and construction
5.1.5	LFG system project management
5.1.6	LFG sampling and analysis
5.2	Groundwater monitoring and sampling
5.2.1	Groundwater system operations
5.2.2	Groundwater system repair, maintenance, and construction
5.2.3	Groundwater system project management
5.2.4	Groundwater sampling and analysis
5.3	Inactive landfill surface maintenance
5.3.1	Inspection
5.3.2	Regulatory inspection
5.3.3	Corrective action
5.3.4	Reporting
5.4	NPDES sampling
5.4.1	Sample analysis
5.4.2	Analysis and regulatory reporting
5.4.3	Corrective action
5.5	Burn site management
5.5.1	Inspection
5.5.2	Regulatory inspection

#	Function/Cost Center Name
5.5.3	Corrective action
5.5.4	Reporting
5.5.5	Investigation
5.6	CIP oversight/project management
5.6.1	Scoping and budgeting
5.6.2	Project design
5.6.3	Bid process
5.6.4	Construction/construction monitoring
5.7	Regulatory compliance
5.7.1	Report writing and submission
5.7.2	Data analysis
5.7.3	Liaison
5.7.4	Permits and fees
5.8	Biological Services
5.8.1	Seed mix design/construction
5.8.2	Biological site visits
5.8.3	Biological surveys
5.8.4	Project monitoring

Table 3: Work Breakdown Structure

The five operations functions for the Miramar Landfill include:

- Landfill Operations
- Greenery Operations
- Hazmat Landfill Load Check
- Fee Booth Operations
- Landfill Maintenance and Monitoring

In summary, because three of these five operations are logically grouped into a single operation, the notional groupings for potential competition include:

- Landfill Operations, Hazmat Landfill Load Check and Fee Booth Operations
- Greenery Operations
- Landfill Maintenance and Monitoring

III. ANALYSIS OF ELIGIBILITY AND APPROPRIATENESS FOR COMPETITION

The PCA report should evaluate the eligibility and appropriateness for competition according to the following criteria:

- Inherently Governmental Determination - Is the function inherently governmental or task is "so intimately related to the exercise of the public interest as to mandate performance by City personnel;"
- Legal Limitations - Are there are legal restrictions regarding a function, activity or task being competitively procured;
- Availability of Alternatives – Does a sufficient market exist and would the City be likely to receive at least two proposals;
- Efficiency & Economic Gain – Could savings be achieved through competitive procurement;
- Risks to Competition - Are there risks to competition (including service interruption, financial liability and damage to public trust or welfare) and how could the risks be mitigated (e.g., in the event of default); and
- Workload, Performance and Property Data – Do we currently have the information required to conduct a competition?

These criteria provide the framework for assessing the eligibility and appropriateness for operations functions for the Miramar Landfill to proceed to competitive procurement immediately or at a later date.

A. Inherently Governmental Determination

According to the Managed Competition Guide, inherently governmental functions are defined as "those services so intimately related to the exercise of the public interest as to mandate their performance by City employees." The main evidence regarding a determination of whether disposal operations are inherently governmental is that most jurisdictions rely on private sector contractors to manage the disposal of their waste. However, several years ago, the County of San Diego sold its landfills to a private company for operations and maintenance, but kept the maintenance and monitoring of closed landfills in-house. Although the County does not recognize the term inherently governmental the County staff determined that this was the most appropriate way to manage this aspect of the operation given liability and regulatory issues.

In another local example, Camp Pendleton Marine Corps Base procures approximately $50 - $60 million in 'environmental services' annually. Using the federal model, they identified policy, consultation, fiscal management, and contract oversight functions performed by in-house staff as their only 'inherently governmental' operations. Landfill regulatory compliance monitoring is outsourced by them. The decision has been made not to compete the City's LMM positions that perform policy, consultation, fiscal management, and contract oversight functions because of the potential risks and increased liability discussed in the 'Risks to Competition' section of this PCA.

Based on the definition of 'inherently governmental,' and as discussed in the following sections, 1.00 FTE in the Fee Booth Operations function has been identified as inherently governmental.

Fee Booth Operations

The budgeted Supervising Management Analyst position provides oversight of the Fee Booth Operation function and serves as the Franchise Administration Program Administrator. This position and costs associated with it would remain a City responsibility even if the remainder of the function is outsourced through the managed competition process.

The City of San Diego's Non-Exclusive Solid Waste Collection system consists of 21 franchisees that have been granted permission to collect, transport and subsequently dispose of waste within the City of San Diego. The franchised haulers pay a "per ton" franchise fee on all waste collected within the City. These fees are paid to the General Fund. The policy decisions made in this position have a direct impact upon revenue generated for the City's General, Refuse Disposal Enterprise, and Recycling Funds. For example, the Franchise Administrator approves the issuance of deferred payment accounts for large commercial landfill customers who request to make scheduled payment to the City for their disposal needs, and is responsible for recommending the granting or denial of entry to the Miramar Landfill. These types of policy decisions require continuous review and updating of Fee Booth operational procedures. As Franchise Administrator, this position is also in charge of the development and implementation of Departmental policies regarding administration of the franchise program, and the implementation of new policies and procedures regarding all aspects of the franchise program (i.e., contracts, tonnage and revenue reporting, accounting tasks). These are duties that obligate the City by setting policies associated with fee booth operations and franchise administration.

B. Legal Limitations

The City owns and operates the Miramar Landfill (Landfill) on land leased from the United States Department of the Navy at Marine Corps Air Station Miramar under a 50-year Ground Lease (Lease), which was entered into in 1995 and expires in 2045. The Lease requires the Navy's advance, written consent before the City may engage a private sector contractor to perform Landfill operations.

The Navy's consent to the City's desired contractor will be required in order to outsource Landfill operations. But, the City will remain responsible and liable to the Navy for all obligations under the Lease, notwithstanding the contracting out of Landfill operations to a private sector contractor.

In addition, the Landfill is regulated by a number of State agencies under various permits. It is recommended that Staff investigate whether any transfer, amendment, modification or re-issuance of any permit, or other consent of any regulatory agency, will be required in the event landfill operations are outsourced.

Further, legal limitations may exist on outsourcing enforcement functions related to Landfill operations such as Code Compliance and Hazmat Load Check functions. The City Attorney will provide a legal opinion on whether duties performed by Enforcement Officials, as defined by the San Diego Municipal Code, can be delegated to private contractors.

In addition, any outsourcing of operations must adequately address existing contractual rights related to operations of, on, under, over or at the Landfill. This includes, but is not limited to, the contracts with Fortistar Methane Group and affiliated entities related to the Landfill Gas Collection System and Co-Generation Facilities, the contract with Alan Company for the Recycling Center, and the contract with Clean Harbors Environmental Services for operations at the Household Hazardous Waste Transfer Facility.

Moreover, any proposed outsourcing will need to take into account and adequately address rights, duties, responsibilities, and obligations related to the City's Metro Biosolids Center, which is situated on the Landfill leasehold.

Disposal fees at the Landfill must continue to comply with San Diego Municipal Code sections 66.0127(c)(4) and Proposition 26, approved during the November 2010 election, which set cost recovery limitations on disposal fees, regardless of any outsourcing. The expenditure of revenues from Landfill fees also will remain subject to existing legal requirements and restrictions. In other words, retaining a private entity to operate the Landfill would not provide any greater flexibility in setting Landfill fees or using Landfill fee revenues.

Finally, the City must continue to satisfy its obligations regarding the funding and maintenance of the Landfill Closure Fund to provide for closure and post-closure maintenance costs and the Landfill Corrective Action Fund to provide for releases at the Landfill, all in compliance with State laws.

C. Availability of Alternatives

Another important element of the competition criteria is identifying whether a potential market exists for the function under review. The Ordinance requires that at least two independent service providers submit proposals to a Request for Proposals (RFP) or the contract will automatically be awarded to the City employees.

For Landfill Operations, Hazmat Landfill Load Check, and Fee Booth Operations, a number of private sector companies may be interested in participating in a managed competition process, six of which are described in Table 4. These companies have performed solid waste collection and disposals services for Federal, State and local governments and currently perform disposal services on active landfills in California. However, some landfills currently have a privately operated landfill face, but a publicly operated fee booth operation. For example, Waste Management currently operates the El Sobrante Landfill for Riverside County, but fee booth operations were retained by the County. In addition, Burrtec operates landfills for the County of San Bernardino, but the County also retained fee booth operations to mitigate issues relating to public perception, conflict of interest, money handling, and discretionary assessment of fees as discussed in the risk assessment of this PCA.

Landfill Operations Service Provider	Description	History of providing services to governmental entities
Allied Waste Industries, Inc.	Allied Waste Industries, Inc., a waste services company, provides collection, recycling and disposal services to residential, commercial and industrial customers in the United States. Allied operates over 300 collection companies and transfer stations as well as over 200 active landfills and recycling facilities.	Franchised hauler for City of Chula Vista.
Burrtec Waste Industries, Inc.	Burrtec Waste Industries, Inc., its sister company EDCO Disposal Corporation and other Burrtec affiliated companies collectively make up the largest privately held solid waste management organization in California.	San Bernardino County Board contracted with Burrtec Waste Industries, Inc. to operate and manage the County's landfills and transfer stations for seven years. Burrtec also contracted to operate Imperial County's Salton City Solid Waste Site.
Foothill Sanitary Landfill	Foothill Sanitary Landfill is operated by Foothill, Inc., under contract with San Joaquin County. Foothill is the destination of wastes generated at the Tracy Delta Materials Recovery Facility and the Lovelace Transfer Station. It's also the destination of waste collected by local solid waste haulers and residents of the surrounding areas.	Provides landfill operations services to San Joaquin County.
Madera Disposal Systems	An integrated solid waste services company that provides solid waste collection, transfer, disposal and recycling services in mostly secondary markets in the Western and Southern U.S. The Company serves more than two million residential, commercial and industrial customers across 27 states.	Provides landfill operations services to Tehama County.
Recology	Recology provides a wide range of resource recovery services and solid waste management services to residential, commercial, and municipal customers in the Western United States.	N/A
Waste Management, Inc.	Waste Management Inc., the largest waste services company, operates 413 collection operations, 370 transfer stations, 283 active landfills, 17 waste-to-energy plants, 131 recycling plants, 95 beneficial-use landfill gas projects and 6 independent power production plants.	Franchised hauler for the cities of El Cajon, Santee, Carlsbad, and Oceanside.

Table 4: External Service Providers for Landfill Operations, Hazmat Landfill Load Check, and Fee Booth Operations

For Greenery Operations, a number of private sector companies may be interested in participating in a managed competition process, 9 of which are described in Table 5. All of these companies have performed greenery recycling and currently operate facilities.

Greenery Operations Service Provider	Description	History of providing services to governmental entities
AgriService, Oceanside	A privately operated facility in Oceanside that provides green waste recycling only. They provide some free product to Oceanside residents on a limited basis.	Operates the El Corazon composting facility for the City of Oceanside.
California Biomass, Indio	A privately operated facility that serves greenery waste haulers and landscapers in Indio and composts some food waste from hotels. Owner also operates other facilities in California.	N/A
Community Recycling and Resource Recovery	Community Recycling & Resource Recovery, Inc. (Community) is located in Sun Valley, California. It operates a composting facility, a transfer station and materials recovery facility (fully permitted with a capacity of 1,700 tons/day), a C&D recycling operation, and farms thousands of acres of land.	N/A
Napa Garbage Service	Local full-service company with parent companies that have served the region of Napa County for over a century. Provides all of the City of Napa and southern unincorporated Napa County with recycling and composting services.	Provides agricultural, food waste, and green material processing for the City of Napa.
North Valley Disposal	Local composting facility in the City of Chico that processes approximately 8,900 tons of greens and woods collected from the curbside recycling and public drop-off programs each year.	Provides agricultural, food waste, and green material processing for the City of Chico.
Recology	Recology provides a wide range of resource recovery services and solid waste management services to residential, commercial, and municipal customers in the Western United States.	N/A
Sonoma Compost "Central"	The Sonoma County Waste Management Agency is a joint powers authority operates the composting facility for the County of Sonoma.	Yes – stipulations in the contract for product giveback to local jurisdictions.
Tierra Verde Industries, Irvine	A privately operated facility that serves greenery waste haulers and landscapers in Irvine.	Yes – pays city $5,000 per acre and $0.60/ton for each ton of green waste delivered (approx $200,000 if applied to Miramar acreage and tonnage) – does not include R&D and food waste.
Zanker, San Jose	A privately operated facility in Salinas to service their own collection of green waste and food waste and, to a lesser extent, other users.	Has a contract with the City of San Jose for greenery collection and includes the gate fee at their composting facility in their collection charges.

Table 5: External Service Providers for Greenery Operations

For Landfill Maintenance and Monitoring, a number of private sector companies may be interested in participating in a managed competition process, four of which are described in Table 6. Three of these companies have performed LMM services for the City of San Diego. It is also anticipated that the landfill operators listed in Table 4 maintain, to varying degrees, in-house or subcontracted ability to conduct LMM activities.

LM&M service provider	Description	History of providing services to governmental entities
Geo Logic Associates	Consulting geotechnical firm provides groundwater monitoring and reporting.	Provides groundwater monitoring and reporting for the City of San Diego
Geosyntec Consultants	Geosyntec is a specialized consulting and engineering firm that works with private and public sector clients to address their new ventures and complex problems involving the environment, our natural resources, and our civil infrastructure.	Provides volatile organic substance mitigation services for the City of San Diego.
SCS Engineers/SCS Field Services	Environmental engineering & construction firm, provides monitoring and maintenance of LFG systems.	Engineering services and LFG system installation and maintenance for City of San Diego
Tetra Tech Inc.	Tetra Tech provides responsible resource management and sustainable infrastructure services that encompass the full life cycle of solutions. We use our broad base of expert resources to dedicate ourselves to our clients' needs, offering innovative and cost-effective solutions to complex world problems.	Provides various environmental planning and compliance services, waste management services, remediation, and geographic information systems (GIS) services for various Federal agencies.

Table 6: External Service Providers for Landfill Maintenance and Monitoring

In addition to the analysis presented in the preceding three tables, the City has examined its database of existing service providers and has found that it currently receives the landfill services from a number of companies. While the existing service providers do not provide as comprehensive scope as is anticipated under this managed competition, it is anticipated that most consulting firms will need to contract as a team of consultants or subcontract in order to provide expertise in all areas. For example, Biological services will most likely have to be subcontracted if the primary contractor cannot meet the specifications as defined in the LMM Statement of Work. However, this research does demonstrate that a local marketplace exists for components of the landfill operations business.

For the functions being considered in this PCA, a potential market does exist.

D. Efficiency & Economic Gain

Current Service Levels

The current standards displayed in Table 7 reflect Fiscal Year 2010 actual data for landfill functions.

Service Measure/Landfill Functions	Description	Current Service Level
Airspace utilization factor/Landfill Operations	Airspace utilization factor is used to determine the available space in the landfill for refuse burial. Monitoring airspace utilization provides the operator with data to ensure the most efficient and effective methods are utilized in refuse burial.	0.50
Tons of waste disposed/ Landfill Operations	The amount of tons of waste disposed of at the Miramar Landfill. The dynamic nature of landfills makes it difficult to set goals for tons of waste disposed, but incoming tonnage does depict resources needed in order to push, compact, and bury waste.	909,484
Ton of material processed/Greenery Operations	Tons of green waste processed into high quality mulch, compost and wood chips which is made available to the public. The tons diverted from the landfill and processed is essential in prolonging its life.	103,203
Total commodity sales/Greenery Operations	Revenue produced from sale of mulch, compost and wood chips.	**REDACTED**
Number of State Minimum Standard Notice of Violations (NOVs) received/All	A notice of violation is presented to the City when State compliance and/or regulatory standards are not met.	2
Tons of hazardous waste diverted from the Miramar Landfill/Hazmat Load Check	Hazardous waste such as flammable liquids, pesticides, oxidizers, asbestos, corrosives, shock sensitive chemicals, explosives, radioactive waste, medical waste, and polychlorinated biphenyls (PCBs) are illegal and dangerous to dispose of in landfills and are extremely harmful to the environment.	19.1
Number of customers served at fee booth/Fee Booth	Number of transactions processed annually at the Miramar Landfill fee booth	350,305
Number of customers served per fee booth employee/Fee Booth	Number of transactions processed annually at the Miramar Landfill fee booth per FTE	21,894
Total revenue collected/Fee Booth	The Fee Booth collects and processes thousands of payments annually. A large amount of money is taken in on a daily basis (average cash/check intake is approximately $30k) all of which comes through the fee booth.	**REDACTED**
Number of solid waste inspections conducted	Conduct and document solid waste inspection in all areas of the Miramar landfill 7 days/wk, 361 days per year	6,660
Tons of special waste manifested	Review, approve, and process all requests for the disposal of all types of special waste. Enter data into an Access database for tracking.	8,477 tons
Percent of extraction wells sampled annually/LMM	Monitoring gas and groundwater extraction wells is vital in mitigating greenhouse gas migration which could result in NOVs and subsequent regulatory fines.	100% (505 gas wells, 180 landfill gas probes, 56 groundwater wells)

Table 7: Landfill Function Current Service Levels

In some instances, there may be known industry standards for efficiency. In these instances the PCA reviews performance against standards to determine if there is opportunity for

improvement. In other instances, there are no industry standards and/or the City does not have good/complete data; in these instances, economic information can serve as an indicator.

No specific industry standards were found for the functions included in this PCA. However, landfill operations are a highly regulated activity and many regulatory requirements are defined for each function identified in this report. For example, the State defines minimum requirements for fee booth operations related to record keeping, traffic control, and proper revenue collection. In addition, Greenery must ensure that stockpiles are kept at or below a certain height. There are also minimum requirements for landfill gas migration, groundwater contamination, equipment usage, and landfill face coverage.

Known industry standards from which to form the basis for further efficiency gain analysis were not identified. However, the operation, maintenance, and monitoring of active and closed landfill sites require that minimum regulations are met. In FY2010, only two Notices of Violation were received by the City from regulatory agencies.

Economic Gain

The economic gain analysis is aimed at determining whether there are possible economic gains that could be realized through a competitive procurement process, recognizing that actual information cannot be known until competitive procurement is undertaken. The determination is based on comparing the cost of performing the function by City forces with the cost of purchasing the same level of service from an outside entity.

The baseline cost estimate from the Budget Summary Report for Fiscal Year (FY) 2011 serves as a foundation for this assessment. Included in the baseline cost estimate are both budget and projected expenditures. Table 8 details the baseline costs estimate for all five of the operations functions for this Pre-Competition Assessment.

Expenses	FY 2011 Budget	FY 2011 Projected
Total Personnel Expenses (PE)		
Personnel Costs		
Fringe Benefits		
Non-Personnel Expenses (NPE)		
Total		

Redacted

Table 8: Operations Functions for the Miramar Landfill Baseline Cost Estimate

The costs at privately owned and operated landfills are considered proprietary information and were not available. As a result, the posted gate disposal fee was used as the unit cost for each of the identified entities in the table below. This information was collected using internet research and by conducting telephone interviews with landfill operators. The table depicts the fee per ton by operator and provides the estimated annual cost of service based on FY2009 tonnage information obtained from CalRecycle Solid Waste Information System (SWIS). The same methodology was used in the calculation of the City's annual cost to allow for comparable data. It is important to note that the City allows fee exempt waste disposal for the military in lieu of

rent as defined in the land lease agreement with the Navy. This amount, which is approximately $1.4 million annually (based on FY2010 incoming military tonnage), while being in lieu of rent is not necessarily a true indicator of the value of the land.

The estimated costs for the independent contractors most likely include costs for fee booth operations and hazmat/load check programs since most landfill operators manage fee booth operations and hazmat/load check programs as a part of their overall landfill operations. The published gate fee is, in almost all cases, the worst case scenario since private companies typically offer better rates for volume customers. The City's Landfill Operation disposal fee is competitive with the other operator's fees which may suggest that an economic gain would be unlikely if the City used a private contractor. However, using tipping fees to project unit and annual costs is not the most effective method to determine economic gain. Competing this function may be the only way to determine if economic gain can be achieved.

In-House Functional Analysis	What is the unit of service provided?	What is the total number of units provided annually?	What is the total annual cost of the service?	What is the unit cost for this service?
Landfill Operations	Tons of waste, pushed, compacted and covered	909,484	**REDACTED**	**REDACTED**
Independent Contractor Analysis				
Allied Waste/Republic (Based on average of Sycamore and Otay landfills)	Tons of waste, pushed, compacted and covered	1,008,108	$63,510,773	$63/ton
Burrtec (Colton Landfill)	Tons of waste, pushed, compacted and covered	151,616	$8,490,496	$56/ton
Foothill Sanitary Landfill	Tons of waste, pushed, compacted and covered	221,326	$7,144,403	$32.28/ton
Madera Disposal Systems	Tons of waste, pushed, compacted and covered	110,786	$6,107,632	$55.13/ton
Mid-Valley Sanitary Landfill	Tons of waste, pushed, compacted and covered	529,533	$29,595,599	$55.89/ton
Recology (Hay Road Landfill)	Tons of waste, pushed, compacted and covered	137,228	$6,586,944	$48/ton
Waste Management Inc. (El Sobrante Landfill)	Tons of waste, pushed, compacted and covered	1,889,484	$64,941,565	$34.37/ton

Table 9: Landfill Operations Economic Gain

Based on the information collected, it is difficult to determine if savings are possible if landfill operations are competitively procured. Obtaining more complete and accurate costing data may be a better method to determine potential savings.

Economic gain for the Greenery was measured by using the posted green waste tipping fee at the various composting facilities listed in the table below. The effort included telephone interviews and online research as well as a review of the CalRecycle's SWIS database of composting facilities in California. Since these operators hold cost and profitability data as proprietary, the gate fee was used as a conservative benchmark of the potential economic gain for the City. The published gate fee is, in almost all cases, the worst case scenario since private companies typically offer better rates for volume customers.

The City allows fee exempt waste disposal for the military in lieu of rent as defined in the land lease agreement with the Navy. This amount, which is approximately $46,000 annually (based on FY2010 incoming military tonnage), while being in lieu of rent is not necessarily a true indicator of the value of the land. The data shows that the Greenery is competitive in its gate fees which may suggest that economic gain is unlikely. However, using tipping fees to project unit and annual costs is not the most effective method to determine economic gain. Competing this function may be the only way to determine if economic gain can be achieved.

In-House Functional Analysis	What is the unit of service provided?	What is the total number of units provided annually?	What is the total annual cost of the service?	What is the unit cost for this service?
Miramar Greenery Processing	Tons Processed	103,203	**REDACTED**	**REDACTED**
Independent Contractor Analysis				
Agriservice/El Corazon, Oceanside	Tons Processed	52,000 Permitted annually (CalRecycle)	$2,080,000	$40/ton
California Biomass, Indio	Tons Processed	218,400 Permitted annually	$6,988,800	$32/ton
Community Recycling & Resource Recovery	Tons Processed	959,920 Permitted annually	N/A	N/A
Napa Garbage Service	Tons Processed	421 Permitted annually	$15,156	$36/ton
North Valley Disposal	Tons Processed	50,700 Permitted annually	$1,318,200	$26 ton; Additional $1 for every .27 ton additional
Recology	Tons Processed	52,000 Permitted annually	$1,560,000	$30/ton
Sonoma Compost "Central", Sonoma County ***	Tons Processed	197,600 Permitted annually	$6,738,160	$34.10/ton
Tierra Verde Industries, Orange County	Tons Processed	39,000 Permitted annually	$1,482,000	$38/ton
Zanker, San Jose	Tons Processed	52,000 Permitted annually	$2,308,800	$44.4/ton

Table 10: Greenery Operations Economic Gain

Tons processed were also considered when measuring economic gain for the Greenery. Since actual tonnage processed was not available for the operators surveyed, the permitted tonnage was used as the benchmark. The Greenery was also competitive in tonnage processed. However, this may not be comparable data as actual tonnage processed could vary dramatically from permitted tonnage. In addition, most private green waste processing operations that also operate landfill operations use their green product as Alternative Daily Cover (ADC) at the landfill face which

could impact tons processed. This is the lowest cost model for cover, but greens take a very long time to decompose in a landfill and will take up valuable landfill capacity. Using the compost product as ADC would effectively eliminate commodities from the marketplace.

A high-level benchmarking comparison was conducted to measure LMM economic gain with closed landfill maintenance and monitoring programs of three county landfill systems. Both the County of San Diego and the County of San Bernardino have privately run landfills, but retained the closed landfill maintenance and monitoring function using in-house staff and individual contracts for specialized services rather than contracting out the entire function to a single entity.

Municipality[1]	# of Sites	Refuse Acres	FTE	FY2010
City of San Diego	16	1248	REDACTED	REDACTED
County of San Diego	23	460	18.00	$4,897,314
County of San Bernardino	35	1820	11.00	$2,175,252
County of Fresno	7	541	11.00	$1,462,822

Table 11: LMM Scope and Cost Comparison

However, because each County operates differently, has significantly different regulatory fees, and accounts for its costs in a different manner, these comparisons must be evaluated for the reasonableness and comparability of costs rather than as an accurate cost that could be used to project potential savings. As an example, San Bernardino County is 20,100 square miles of area, and the majority of its closed landfills are small volume, isolated landfills in the desert areas of the County with low rainfall and groundwater depths of hundreds to thousands of feet below the surface so groundwater monitoring is a much lesser issue than at San Diego's urban landfills. As can be seen in the table above, the City of San Diego LMM costs compare to the other counties.

The City of San Diego LMM function currently contracts a significant portion of its operations to engineering and consulting firms for groundwater and landfill gas (LFG) monitoring, laboratory analysis, report writing, LFG system maintenance, and other services of the annual costs of the function. The flexibility of this approach allows an opportunity to compare the costs of the private sector with City costs for individual projects and to select the lowest cost option.

Based on this information, economic gain could not be realized considering a majority of the function is already contracted out and the potential risks and increased liability are too high and economic benefits are too low to consider contracting out the staff managing the LMM function.

E. Risks to Competition

Risk analysis considers the degree to which contracting out a function would expose the City to greater risk or liability, including service interruption, health and safety issues, financial liability, and damage to public trust. In some cases, contracting out a function would expose the City to risks that could result in environmental contamination and even a breach of the lease with the Navy which could effectively close landfill operations. The following potential risks to competition are identified, along with risk mitigation options for each of the landfill functions.

[1] Data for the City of San Diego and the County of San Diego is from FY2009. Data for the County of San Bernardino and the County of Fresno is from FY2007.

Landfill Operations

There are several risks associated with a private contractor providing landfill operations. It is very difficult to develop a statement of work for an ever-changing operation. A statement of work is unchanging, but a landfill is dynamic which causes the need for new and revised duties. This could result in a large number of change orders needed to ensure the contractor is performing all necessary duties to ensure the landfill is in compliance with regulatory standards.

A private contractor will not have the same working knowledge of the landfill which presents a number of risks. A lack of working knowledge could result in the City receiving NOVs and subsequent fines up to $10,000 a day for non-compliance with Federal, State, and local regulatory standards. In addition to increased financial liability, the Landfill could be closed if a private vendor fails to operate an effective bird control program as defined in the lease agreement with the Navy.

The following potential risks to competition are identified, along with risk mitigation options:

#	Landfill Operations Service Risk	Risk Type	Level of Risk	Magnitude of Impact	Possible Mitigation
1	An operator's actions during the active life of the landfill will impact the maintenance and monitoring needs of the landfill once it is closed. For example, improper burial of material could result in slope and drainage issues once the landfill is closed. This could result in increased costs to the City in the maintenance of the landfill post closure.	Financial liability	Medium	Medium	- Onsite contract and project management would be required to ensure proper landfill operations are followed as defined in the scope of work. - Establish strict guidelines in the scope of work and establish quality control measures to ensure contractor is performing at agreed standards.
2	It is very difficult to develop a statement of work (SOW) for a dynamic operation. A SOW is unchanging, but a landfill is dynamic which causes the need for new and revised duties. This could result in a large number of change orders needed to ensure the contractor is performing all necessary duties to keep the landfill in compliance with regulatory standards.	Financial liability	Low	Low	- Include all possible contingencies in the statement of work in the daily/seasonal operation of the landfill, or specify that the contractor is responsible for all contingencies that occur excluding contingencies beyond the vendor's control..
3	The Miramar Landfill's demonstrated successful bird control program becomes ineffective; there is a risk of the landfill being closed prior to it being filled to capacity. Federal Aviation Administration rules prohibit landfills from being sited within 10,000 feet of a jet runway because of the potential for bird aircraft strikes.	Other	High	High	- Conduct frequent and regular audits of contractor's bird control program to ensure they are implementing effective measure to mitigate bird issues. - Establish strict guidelines in the scope of work and establish quality control measures to ensure contractor operating an effective bird control program.

#	Landfill Operations Service Risk	Risk Type	Level of Risk	Magnitude of Impact	Possible Mitigation
4	Miramar Landfill must meet Federal, State, and Local regulatory standards or a Notice of Violation (NOV) or fine could be issued against the City. No matter which service provider performs the Disposal Operation function, the City would maintain responsibility for the permits and thus for the Miramar Landfill's compliance with those requirements.	Financial liability	Medium	Medium	- Conduct frequent and regular audits to ensure contractor is in compliance with regulations and meeting minimum specifications of contract. - Specify that the contractor is responsible for any financial penalties and/or mitigation measures.
5	A private contractor may fail in its operation of the landfill. If this does occur, the City will be unable to stand up a force to operate the landfill.	Service interruption	Low	High	- Award contract to another contractor if current contractor fails.
6	- A private contractor does not necessarily have the same interest in extending the life of the landfill. They are for profit agencies focused primarily on the bottom line. If the landfill fills quicker it will impact the costs of disposal for the public and businesses of the City. - In addition, the landfill currently promotes general public use while private contractors historically discourage public use by setting strict public tipping schedules.	Other	Medium	High	- Establish strict guidelines in the scope of work and establish quality control measures (i.e. air space utilization factor) to ensure contractor is performing at agreed standards and developing highest quality product. - Establish penalties for not following those standards.
7	- A private contractor does not have the same working knowledge of the landfill, it's equipment, and the other assets that are within the footprint (i.e. gas lines, water lines, sludge lines, fuel lines, etc.). Damaging any of these assets could result in significant maintenance and/or replacement costs and safety issues.	Financial liability; Health and safety issues	Low	Medium	- Onsite contract and project management would be required to ensure proper landfill operations are followed as defined in the scope of work. - Provide detailed maps and extensive training to contractor on location of all assets.

Table 12: Landfill Operations Risk Assessment

Greenery Operations

ESD staff has spent over 15 years building the greenery program which has resulted in a sustainable market base for commodity sales and increased diversion from the landfill. Short-term profit goals could drive a private operator to accept more contaminated material, compost it for a shorter period, and ship it off site at a very low cost. Over the longer term this strategy will result in a loss of customers and decreased commodity revenues. Future diversion could also be impacted unless proper mitigation efforts are taken to ensure the provider implements an effective research and development program that focuses on increasing diversion. These risks would need to be mitigated by having strict operational standards in the contract. The private operator's use of City equipment is also of significant risk to the City with increased financial liability and safety issues if that option is pursued. The City would have to properly mitigate

these risks by requiring the vendor to furnish their own equipment or to abide by the current usage and maintenance standards, and be responsible for any damages due to improper use or care.

The following potential risks to competition are identified, along with risk mitigation options:

#	Greenery Operations Service Risk	Risk Type	Level of Risk	Magnitude of Impact	Possible Mitigation
1	- Past performance of some large privately operated greenery vendors in San Diego County has been poor. The primary cause of their failures is a focus on short term profits over long term operational sustainability. Gate fees generate more revenue than the sale of the finished products, so they accept more incoming product than can be marketed. This leads to space constraints and inability to completely process the product to the highest quality standards. - The City has spent over 15 years building the greenery program and establishing a customer base which has resulted in a sustainable market base. If the private contractor fails to focus on high quality product (the primary goal of the City) the sustainable markets that the City created may be lost for many years.	Other; Public trust	High	High	- Establish strict guidelines in the scope of work and establish quality control measures to ensure contractor is performing at agreed standards and developing highest quality product. - Establish penalties for inadequate performance.
2	Greenery is used and will be used as a test bed for enhancing recycling in San Diego. It is difficult to build R&D into a contract and could result in expensive change orders or the loss of potential increased diversion. This loss of diversion could increase the City's exposure to regulatory fines associated with diversion rates.	Other; Financial liability	Medium	Medium	- Establish strict guidelines in the scope of work to ensure research and development is built into the contract. - Conduct frequent and regular audits to ensure contractor is in regulatory compliance and is meeting diversion rate goals. - Subject matter expert would be required to ensure current R&D is continued.
3	Greenery must meet Federal, State, and Local regulatory standards or an NOV or fine could be issued against the City. The Greenery could also be closed due to non-compliance (exceeding height limits, processing times, odor emissions, dust migration, air quality, fires). No matter which service provider performs the function, the City will maintain responsibility for the permits.	Financial liability	Medium	High	- Conduct frequent and regular audits to ensure contractor is in compliance with regulatory standards.

#	Greenery Operations Service Risk	Risk Type	Level of Risk	Magnitude of Impact	Possible Mitigation
4	- If the City owned equipment at the Greenery is included in the SOW as "City-furnished" and the City remains the owner of the equipment the contractor will have no vested interest in maintaining and/or extending the life of the City's equipment. This could result in costly repairs and premature replacement of expensive, specialized equipment. - A private contractor may not be familiar with the type of composting equipment used in the City operation and could either injure themselves or cause equipment to be place out of service and so reduce the viability of the operation.	Transition; Financial liability; Health and safety issues	High	High	- If the equipment is offered and used by the Contractor, include maintenance protocols that would have to be met. The City could require the Contractor to use the City's designated maintenance provider and require the contractor to be responsible for all replacement and repair costs. If the winning bidder does not want this equipment auction the equipment and require the vendor to provide their own. - Require the contractor to provide insurance that is acceptable to the City and indemnify the City for the contractor's actions.
5	Most private green waste processing operations that also operate landfill operations use their green product as alternative daily cover at the landfill face. This is the lowest cost model for cover. However, greens take a long time to decompose in a landfill and will take up valuable landfill capacity. Use of this practice will also eliminate all established markets.	Other; Public trust	High	High	- Establish strict guidelines in the scope of work to ensure the contractor produces the agreed upon product type(s) and uses the material for agreed upon purposes.
6	A private contractor does not have the same working knowledge of the landfill, and the Greenery operates on top of a capped portion of landfill. A contractor could damage the cap, LFG well head, or LFG collection lines that are buried just feet below the surface. Unnoticed damage could result in NOV from regulators. Damaging any of these assets could result in significant maintenance and/or replacement costs and safety issues.	Transition; Financial liability; Health and safety issues	Medium	High	- Establish strict guidelines for damage to the landfill assets by Greenery operator. - Conduct frequent monitoring of LFG collection equipment and landfill cap. - Develop control document for condition that landfill cap, wells, well heads, and LFG collection lines are in before transition. - Require the contractor to be responsible for any consequences of violations or damages.

Table 13: Greenery Operations Risk Assessment

Hazmat Landfill Load Check

A provider performing the load check function that allows reduced or non-dedicated inspections may open the City up to increased financial liability, could damage public trust, and may result in other environmental concerns. A reduced or non-dedicated inspection program could result in

an increase in the disposal of prohibited waste potentially impacting landfill staff, the public, and the environment. For example, a for-profit contractor may deal with illegal entry of prohibited wastes by applying a surcharge rather than contacting regulators to ensure appropriate fines are applied by relevant agencies so as not to discourage businesses from using the landfill.

The following potential risks to competition are identified, along with risk mitigation options:

#	Hazmat Landfill Load Check Service Risk	Risk Type	Level of Risk	Magnitude of Impact	Possible Mitigation
1	The illegal disposal of prohibited wastes such as friable asbestos, explosives, radioactive waste, and shock sensitive chemicals pose significant safety risk to landfill operators and the public. A reduced or non-dedicated inspection program could result in an increase in the disposal of prohibited waste potentially impacting landfill staff, public, and environment.	Health and safety issues; Damage to public trust; Other (Environmental)	Medium	High	- Have an in-house subject matter expert trained in identifying prohibited wastes at the landfill to ensure contractors are performing to agreed standards. - Require the contractor to provide the current level of inspections. - Have the contractor indemnify the City for the contractor's errors or omissions.
2	- A for-profit contractor may be less likely to call in outside regulators to maximize enforcement for violations involving the illegal disposal of prohibited wastes so as not to discourage businesses from using their landfill and instead resort solely to monetary penalties. Failure to notify the appropriate agencies regarding incidents involving the disposal of regulated wastes and PCB wastes is a violation of federal and state regulations and landfill operating permits which could result in a fine of $25,000 per day of violation and imprisonment for one year, or both. In addition to fines and possible imprisonment, the City would also be liable for administrative costs and completion of supplemental projects which could result in costs to the City exceeding $100,000 per incident. - A less dedicated inspection program, could result in significantly less hazardous waste being diverted from disposal.	Damage to public trust; Financial liability; Other (Environmental)	Medium	High	- Develop detailed policies and procedures to ensure the contractor referred violations to regulatory agencies. - Have an in-house subject matter expert(s) trained in identifying prohibited wastes at the landfill to ensure contractors are performing to agreed standards and that required reporting is completed. - Have the contractor indemnify the City for the contractor's errors or omissions.

Table 14: Hazmat Landfill Load Check Risk Assessment

Fee Booth Operations

The most apparent risk associated with a private contractor performing fee booth operations for the City is the potential conflict of interest and inequity in the assessment of disposal fees. For

example, the fee booth operator may provide discounted fees for solid waste haulers of the same company. Local waste haulers have expressed concerns related to this issue as it could create inequity in waste hauling. In addition, the City must also consider the risk associated with a public or private contractor handling revenue collection of approximately $20,000 - $30,000 a day in cash and check payments.

The following potential risks to competition are identified, along with risk mitigation options:

#	Fee Booth Operations Service Risk	Risk Type	Level of Risk	Magnitude of Impact	Possible Mitigation
1	Wait times at fee booth and at landfill face could increase due to changes in operational procedures (i.e. using fewer fee booth lanes),.	Service interruption	Low	Low	- Onsite contract management and oversight - Establish strict guidelines in the scope of work and establish quality control measures to ensure contractor is performing at agreed standards.
2	- Less control over private contractors cash/check handling operations, policies, and procedures - Conflict of interest may arise if fee booth operator is the same company as waste haulers that use the landfill (i.e.. booth operators may allow free/discounted entry for certain haulers). Local waste haulers expressed concern related to this issue as it creates inequity in waste hauling. - Less control over private contractors discretionary assessment of tipping fees	Financial liability	High	High	- Onsite contract management and oversight to ensure proper cash/check handling. - Implement 'secret shopper' program; - Install cameras to monitor fee booth operator cash/check handling. - Conduct frequent and regular audits of fee booth operations to ensure proper cash/check handling processes are followed to ensure all incoming tonnage is assessed the appropriate fee. - Establish strict guidelines in the scope of work and establish quality control measures to ensure contractor is performing at agreed standards.
3	Confidential and sensitive financial and tonnage transaction information contained in RAD database (i.e., Customer names and contact information, deferred account information, transaction adjustments, tonnage by hauler/fee type, etc.)	Transition	Medium	Medium	- Develop firewall between private contractor and City (increased IT costs to maintain).

Table 15: Fee Booth Operations Risk Assessment

Landfill Maintenance and Monitoring

Although not deemed inherently governmental, a portion of the activities performed within the LMM function should not be contracted out as potential risks and increased liability are too high and economic benefits are very low. These activities are performed by 1.00 Sr. Civil Engineer, 1.00 Sr. Mechanical Engineer, and 3.00 Associate Civil Engineers and can be categorized into project management, regulatory compliance, and strategic planning.

Project management includes Capital Improvement Project (CIP) and general contract management. These activities must be performed by City staff as they require government authority in decision making. For example, a private contractor does not have the authority to manage public CIP projects as they require significant oversight of budgetary transactions. In addition, project managers act in the public's best interest to determine priorities for current projects and identify future capital needs.

Another essential component of the LMM function is ensuring the ongoing regulatory compliance of the active and closed landfill sites required by various regulatory agencies including the Air Pollution Control District (APCD), Regional Water Quality Control Board (RWQCB), California Air Resources Board (CARB), and CalRecycle. Work associated with this activity is required by these agencies to maintain landfill site compliance and keep on-going local, State, and Federal permits current. For example, the City currently manages several contracts for groundwater and LFG monitoring. Regulatory agencies require that groundwater wells and LFG probes be read and reported on throughout the year to monitor LFG migration and groundwater quality. The City is responsible and liable for complying with all regulatory standards even if landfill sites were operated and/or maintained by a private contractor.

Non-compliance issues could result in NOVs and tens of thousands of dollars of fines per day by each agency which could damage public trust and increase the City's financial liability if serious violations occur. For similar reasons, the counties of San Diego, San Bernardino, and Riverside have retained the LMM function for their closed landfill sites.

An example of a costly NOV and fine is the United States Marine Corps which has operated the Las Pulgas Landfill at Camp Pendleton since 1980. In 1999, they opened the first phase of a seven phase expansion that would increase its size from 39.4 to 88.7 acres. Construction of the Phase I liner system was awarded to Selco, Inc. and the construction quality assurance (CQA) of the project was awarded to a private professional geotechnical firm in San Diego.

In the summer of 1999, the USMC failed to submit a liner certification CQA report to the RWQCB. When it was finally submitted in December, it was found to be incomplete. After numerous correspondences in the ensuing years, the USMC was issued a NOV (R-2003-0154) by the Board for excessive erosion and runoff in April 2003 when leachate gushed from a landfill slope during heavy rains. The landfill stopped accepting trash soon thereafter and in 2004 was again cited by the Board for not addressing the areas of concern.

The primary cause of failure was the breakdown in the quality control and quality assurance programs provided under contract by private sector companies. This resulted in the substandard construction of the liner system using materials and methods not in the specifications. In 2007, the USMC pledged to correct the problems at an estimated cost of $20M which includes completely removing all waste placed in the Phase I expansions and transferring it to another lined landfill, pumping and storing all leachate generated at the Phase I expansion and treating it at a wastewater treatment facility prior to an ocean discharge.

City staff is also responsible for strategic planning which includes managing the Long Term Resource Management Planning Contract. This planning effort will identify options and strategies for future management of our resources, including solid waste. It is required that the City maintains management of this function as the project includes the planning, development, and implementation of resource recovery facilities, transfer facilities, and the potential expansion of facilities on the Miramar Landfill leasehold.

The following potential risks to competition are identified, along with risk mitigation options:

#	LM&M Service Risk	Risk Type	Level of Risk	Magni-tude of Impact	Possible Mitigation
1	City's closed landfills must meet Federal, State, and Local regulatory standards or a NOV and/or huge fines could be issued against the City, which would maintain responsibility for the permits and thus for the closed landfill's compliance with those requirements.	Financial liability	Med-ium	Medium	Conduct frequent and regular audits to monitor whether contractor is performing tasks to ensure compliance with closed landfill regulatory standards
2	- City staff is currently cross-functionally trained. For example, an engineer could perform both groundwater and landfill gas monitoring efforts at any given site. A private contractor may have expertise in an area, but it is unlikely that they will have the training to perform duties across functions. - In an effort to be more proactive the current City staff is able to interface with future regulations and comply by current regulations. Private contractors are most likely to have a minimum cost focus and so will comply with the current minimum regulations rather than being forward thinking to implement preventative actions.	Financial liability/ Service inter-ruption	Low	Low	- Ensure selected vendor has training in both gas and groundwater monitoring. - Establish strict guidelines in the scope of work and establish quality control measures to ensure contractor is performing at agreed standards.

Table 16: LMM Risk Assessment

F. Workload, Performance, and Property Data Assessment

Workload, performance, and property data are critical to developing a Statement of Work (SOW), should a function move to competitive procurement. The range and depth of workload/performance/ property data that are available (or not) also are important factors in determining a future competition schedule. In conducting this assessment, the following criteria were evaluated to establish the current level of data available.

Question	Explanation	Status
Does workload data exist for the function for the last fiscal year?	Indicates whether or not the annual workload for the function is available or easily obtainable. For some functions, there may not currently be a formal collection process for workload information. For those functions, a data collection mechanism and process will need to be defined and developed.	Yes
Is workload tracked using an automated system?	Identifies any records, spreadsheets, logs, or other tracking mechanisms that are currently used to collect workload data.	Yes
Has workload been tracked for at least the last three years?	Indicates whether workload is changing or is relatively consistent from year to year. Workload that is increasing, decreasing, or fluctuating from year to year might affect the amount of data and level of effort that will be required to estimate workload.	Yes
Is workload tracked consistently?	Identifies whether tracking systems are collecting workload output data in a timely and accurate fashion. A determination must be made regarding the overall reliability of the data tracked in the existing systems.	Yes
Can workload be accurately projected into the future?	Examines whether collected data is sufficient to ensure the future statement of work accurately addresses the function's true requirements and limits the potential for modifications.	Yes and /No[2]
Is the performance level of the City workforce actively tracked?	Identifies whether adequate performance information is available to determining the level of performance in a future competition.	Yes
Is there a property tracking system?	Identifies whether government property is properly tracked in order to maintain proper inventory control and determine its disposition in a potential competitive procurement.	Yes
Is the workload projected to change in the future?	Identifies workload capacity requirements for current and future services, to ensure sufficient capacity exists to support existing and new serivces.	Yes and/No[3]

Table 17: Workload, performance & property data assessment

The result of the workload, performance, and property systems assessment for the operations functions for the Miramar Landfill is that a system is available for all workload, performance, and property data required. Additionally, the data system is evaluated at Level IV according to

[2] The answer is "yes" for all activities except for LMM, which can estimate workload (samples taken, well monitored, etc.) based on prior year levels, but unpredictable increases in regulatory compliance standards make it difficult to accurately project future workload.

[3] The answer is "yes" for all activities except for LMM and Load Check. LMM can estimate workload (samples taken, well monitored, etc.) based on prior year levels, but unpredictable increases in regulatory compliance standards make it difficult to accurately project future workload. Load Check activities related to conducting inspections are relatively consistent while enforcement and hazardous waste diversion are variable.

the PCA data call, which states that a system(s) is available for all workload and workload counts are considered accurate and reliable (with very few data entry errors). There is very little effort required to validate the data."

IV. CONCLUSION

As determined through this pre-competition assessment, Landfill Operations, Hazmat Landfill Load Check, a portion of LMM, and a portion of Fee Booth functions are deemed to be eligible and appropriate for competitive procurement. The pre-competition assessment team determined that they:

- Are not inherently governmental;
- Are not limited, legally, from being procured from an outside source, although the City Attorney has not provided a legal opinion on whether duties performed by Enforcement Officials, as defined by the San Diego Municipal Code, can be delegated to private contractors;
- Can be procured from an established competitive market;
- Do not face significant risks that cannot be mitigated through the contracting process. However, a portion of the LMM function as described in the 'Risks to Competition' section does face significant risks that cannot be mitigated through the contracting process; and
- Have the potential to realize some economic gain.

As determined through this pre-competition assessment, Greenery Operations function is deemed to be eligible and appropriate for competitive procurement. The pre-competition assessment team determined that it:

- Is not inherently governmental;
- Is not limited, legally, from being procured from an outside source;
- Can be procured from an established competitive market;
- Does not face significant risks that cannot be mitigated through the contracting process; and
- Has the potential to realize economic gain.

As determined through this pre-competition assessment, the franchise administration portion of Fee Booth operations function is deemed ineligible and inappropriate for competitive procurement. The pre-competition assessment team determined that it:

- Is inherently governmental;
- Is not limited, legally, from being procured from an outside source;
- Can be procured from an established competitive market;
- Does not face significant risks that cannot be mitigated through the contracting process; and
- Has limited potential to realize economic gain.